Appl. No. 09/118,833

CLAIM SET AS AMENDED

1-3. (Canceled)

- 4. (Previously Presented) A solid electrolyte fuel battery, in which a sintered interconnector is used for connecting cells of the solid electrolyte fuel battery, and the sintered interconnector comprises a material having a matrix of the general formula MTiO₃ where M is Mg, Ca, Sr, or Ba.
- 5. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 4, wherein the current passage of the interconnector is current collection in the vertical direction from a fuel electrode through the interconnector.
- 6. (Previously Presented) A solid electrolyte fuel battery, in which a cosintered interconnector for connecting cells of the solid electrolyte fuel battery comprises a material having a matrix of the general formula A_{1-x}B_xC_{1-y}D_yO₃ where A is Ca, Sr or Ba, B is a rare earth element, aluminum or chromium, C is titanium, D is niobium or tantalum, $0 < x \le 0.2$ and $0 \le y \le 0.2$.

- 7. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 6, wherein the current passage of the interconnector is current collection in the vertical direction.
- 8. (Previously Presented) A solid electrolyte fuel battery, in which a cosintered interconnector for connecting cells of the solid electrolyte fuel battery comprises a material having a matrix of the general formula $A_{1-x}B_xC_{1-y}D_yO_3$ where A is Mg, B is a rare earth element, aluminum or chromium, C is titanium, D is niobium or tantalum, $0 < x \le 0.2$ and $0 \le y \le 0.2$.
- 9. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 8, wherein the current passage of the interconnector is current collection in the vertical direction.
- 10. (Previously Presented) A solid electrolyte fuel battery, in which an interconnector for connecting cells of the solid electrolyte fuel battery comprises a material having a matrix of the general formula MTiO₃ where M is Mg, Ca, Sr, or Ba, wherein the interconnector is integrally burned within said battery.
- 11. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 10, wherein said battery comprises a fuel electrode, an electrolyte, an

interconnector and an air electrode laminated onto a substrate, which are integrally burned within said battery.

12. (Previously Presented) A method of making a solid electrolyte fuel battery, in which an interconnector for connecting cells of the solid electrolyte fuel battery is co-sintered, and comprises a material having a matrix of the general formula MTiO₃ where M is Mg, Ca, Sr, or Ba, said method comprising:

integrally burning within said battery the interconnector for connecting cells of the solid electrolyte fuel battery.

- 13. (Previously Presented) The method of making the solid electrolyte fuel battery as claimed in claim 12, wherein said battery comprises a fuel electrode, an electrolyte, an interconnector and an air electrode laminated onto a substrate.
- 14. (Previously Presented) A method of making a solid electrolyte fuel battery, in which a co-sintered interconnector for connecting cells of the solid electrolyte fuel battery comprises a material having a matrix of the general formula $A_{1-x}B_xC_{1-y}D_yO_3$ where A is Ca, Sr or Ba, B is a rare earth element, aluminum or chromium, C is titanium, D is niobium or tantalum, $0 < x \le 0.2$ and $0 \le y \le 0.2$, said method comprising:

integrally burning within said battery the interconnector for connecting cells

of the solid electrolyte fuel battery.

15. (Previously Presented) The method of making the solid electrolyte fuel battery as claimed in claim 14, wherein said battery comprises a fuel electrode, an

electrolyte, an interconnector and an air electrode laminated onto a substrate.

16. (Previously Presented) A method of making a solid electrolyte fuel

battery, in which a co-sintered interconnector for connecting cells of the solid

electrolyte fuel battery comprises a material having a matrix of the general formula

 $A_{1-x}B_xC_{1-y}D_yO_3$ where A is Mg, B is a rare earth element, aluminum or chromium,

C is titanium, D is niobium or tantalum, $0 < x \le 0.2$ and $0 \le y \le 0.2$, said method

comprising:

integrally burning within said battery the interconnector for connecting cells

of the solid electrolyte fuel battery.

17. (Previously Presented) The method of making the solid electrolyte fuel

battery as claimed in claim 16, wherein said battery comprises a fuel electrode, an

electrolyte, an interconnector and an air electrode laminated onto a substrate.

18. (Previously Presented) The method of claim 12, wherein the current

passage of the interconnector is current collection in the vertical direction.

- 19. (Previously Presented) The method of claim 14, wherein the current passage of the interconnector is current collection in the vertical direction.
- 20. (Previously Presented) The method of claim 16, wherein the current passage of the interconnector is current collection in the vertical direction.
- 21. (Previously Presented) The method of claim 12, wherein the integrally burning is performed at a temperature of 1,300 °C to 1,400 °C.
- 22. (Previously Presented) The method of claim 14, wherein the integrally burning is performed at a temperature of 1,300 °C to 1,400 °C.
- 23. (Previously Presented) The method of claim 16, wherein the integrally burning is performed at a temperature of 1,300 °C to 1,400 °C.
- 24. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 4, wherein the interconnector is a hermetic interconnector having a relative density of greater or equal to 94%.

- 25. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 6, wherein the interconnector is a hermetic interconnector having a relative density of greater or equal to 94%.
- 26. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 8, wherein the interconnector is a hermetic interconnector having a relative density of greater or equal to 94%.
- 27. (Previously Presented) The solid electrolyte fuel battery as claimed in claim 10, wherein the interconnector is a hermetic interconnector having a relative density of greater or equal to 94%.
- 28. (Previously Presented) A solid electrolyte fuel battery, in which a sintered interconnector is used for connecting cells of the solid electrolyte fuel battery, and the sintered interconnector comprises a material having a matrix consisting essentially of MTiO₃ where M is Mg, Ca, Sr, or Ba.
- 29. (New) The solid electrolyte fuel battery as claimed in claim 4, wherein the sintered interconnector was formed by sintering at a temperature of about 1,300-1,500 °C.

Amendment dated October 24, 2003 Appl. No. 09/118,833 Reply to Office Action dated July 24, 2003 Attorney Docket No.: 0965-0232P

30. (New) A solid electrolyte fuel battery, which comprises: cells of the solid electrolyte fuel battery; and

a sintered interconnector for connecting the cells of the solid electrolyte fuel battery, the sintered interconnector comprising a material having a matrix of the general formula MTiO₃ where M is Mg, Ca, Sr, or Ba, and the sintered material has been formed by a step consisting essentially of sintering the material after molding.